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NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION
DEPARTMENT OF CHEMISTRY

# The Feeding-Stuffs Inspection

**For 1913**

MADE FOR THE
STATE BOARD OF AGRICULTURE

BY B. E. CURRY AND T. O. SMITH

NEW HAMPSHIRE COLLEGE
OF
AGRICULTURE AND THE MECHANIC ARTS,
DURHAM, N. H.

NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND THE MECHANIC ARTS.

# NEW HAMPSHIRE AGRICULTURAL EXPERIMENT STATION

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# FEEDING STUFFS INSPECTION FOR 1913.

The samples for the 1913 feeding stuffs inspection were drawn by Mr. H. B. Tuttle for the State Board of Agriculture. In all, 354 samples were received at the Experiment Station. Of these, 41 represented duplicates and samples which did not require a license or analysis. The remaining 313 samples were analyzed.

The state law regulating the sale of commercial feeding-stuffs follows:

## An Act to Regulate the Sale of Concentrated Commercial Feeding-stuffs.

Section 1. Every manufacturer, company, or person, who shall sell, offer, or expose for sale or for distribution in this state any concentrated commercial feeding-stuff used for feeding farm live stock, shall furnish with each car or other amount shipped in bulk and shall affix to every package of such feeding-stuff, in a conspicuous place on the outside thereof, a plainly printed statement clearly and truly certifying the number of net pounds in the package sold or offered for sale, the name or trademark under which the article is sold, the name of the manufacturer or shipper, the place of manufacture, the place of business, and a chemical analysis stating the percentages it contains of crude protein, allowing one per centum of nitrogen to equal six and one-fourth per centum of protein, of crude fat, and of crude fibre, both constituents to be determined by the methods prescribed by the association of official agricultural chemists. Whenever any feeding-stuff is sold at retail in bulk or in packages belonging to the purchaser, the agent or dealer, upon

request of the purchaser, shall furnish to him the certified statement named in this section.

SECT. 2. The term "concentrated commercial feeding-stuffs," as used in this act, shall include linseed meals, cottonseed meals, pea meals, cocoanut meals, gluten meals, gluten feeds, maize feeds, starch feeds, sugar feeds, dried brewer's grains, malt sprouts, hominy feeds, cerealine feeds, rice meals, oat feeds, corn and oat chops, wheat, rye and buckwheat bran and middlings, ground beef, or fish scraps, mixed feeds and all other materials of similar nature; but shall not include hays and straws, the whole seeds nor the unmixed meals made directly from the entire grains of wheat, rye, barley, oats, Indian corn, buckwheat and broom corn.

SECT. 3. Before any manufacturer, company, or person shall sell, offer, or expose for sale in this state any concentrated commercial feeding-stuffs, he or they shall, for each and every feeding-stuff bearing a distinguishing name or trademark, file annually during the month of December with the secretary of the board of agriculture a certified copy of the statement specified in the preceding section, said certified copy to be accompanied, when the secretary shall so request, by a sealed glass jar or bottle containing at least one pound of the feeding-stuff to be sold or offered for sale, and the company or person furnishing said sample shall thereupon make affidavit that said sample corresponds within reasonable limits to the feeding-stuff which it represents, in the percentage of protein and fat which it contains.

SECT. 4. Each manufacturer, importer, agent, or seller of any concentrated commercial feeding-stuffs, shall pay annually during the month of December to the secretary of the board of agriculture an analysis fee of fifteen dollars, for each brand offered for sale within the state. Whenever a manufacturer, importer, agent, or seller of

concentrated commercial feeding-stuff desires at any time to sell such material and has not paid the analysis fee therefor in the preceding month of December, as required by this section, he shall pay the analysis fee prescribed herein before making any such sale. The amount of analysis fees received by said secretary pursuant to the provisions of this section shall be paid by him to the treasurer of the State of New Hampshire. The treasurer of the State of New Hampshire shall pay from such amount when duly approved the moneys required for the expense incurred in making the inspection required by this act and enforcing the provisions thereof. The secretary of the board of agriculture shall report biennially to the legislature the amount received pursuant to this act, and the expense incurred for salaries, laboratory expenses, chemical supplies, traveling expenses, printing, and other necessary matters. Whenever the manufacturer, importer, or shipper of concentrated commercial feeding-stuff shall have filed the statement required by section 1 of this act and paid the analysis fee as prescribed in this section, no agent or seller of such manufacturer, importer, or shipper shall be required to file such statement or pay such fee.

SECT. 5. The secretary of the board of agriculture shall annually cause to be analyzed at the New Hampshire College Agricultural Experiment Station, at least one sample, to be taken in the manner hereinafter prescribed, of every concentrated commercial feeding-stuff sold or offered for sale under the provisions of this act. Said secretary shall cause a sample to be taken, not exceeding two pounds in weight, for said analysis, from any lot or package of such commercial feeding-stuff which may be in the possession of any manufacturer, importer, agent, or dealer in this state; but said sample shall be drawn in the presence of the parties in interest, or their representatives, and taken

from a parcel or a number of packages, which shall not be less than ten per centum of the whole lot sampled, and shall be thoroughly mixed, and then divided into two equal samples, and placed in glass vials and carefully sealed and a label placed on each stating the name of the party from whose stock the sample was drawn and the time and place of drawing, and said label shall also be signed by the person taking the sample, and by the party or parties in interest or their representatives at the drawing and sealing of said samples; one of said duplicate samples shall be retained by the secretary and the other by the party whose stock was sampled, and the sample or samples retained by the secretary shall be for comparison with the certified statement named in section 3 of this act. The result of the analysis of the sample or samples so procured, together with such additional information as circumstances advise, shall be published in reports or bulletins from time to time.

Sect. 6. Any manufacturer, importer, or person who shall sell, offer or expose for sale or for distribution in this state any concentrated commercial feeding-stuff, without complying with the requirements of this act, or any feeding-stuff which contains substantially a smaller percentage of the constituents than are certified to be contained, shall, on conviction in a court of competent jurisdiction, be fined not more than one hundred dollars for the first offense, and not more than two hundred dollars for each subsequent offense.

Sect. 7. Any person who shall adulterate any kind of meal or ground grain with milling or manufacturing offals, or any other substance whatever, for the purpose of sale, unless the true composition, mixture, or adulteration thereof is plainly marked or indicated upon the package containing the same or in which it is offered for sale; or any person who knowingly sells, or offers for sale, any

meal or ground grain which has been so adulterated unless the true composition, mixture, or adulteration is plainly marked or indicated upon the package containing the same, or in which it is offered for sale, shall be fined not less than twenty-five or more than one-hundred dollars for each offense.

SECT. 8. Whenever said secretary becomes cognizant of the violation of any of the provisions of this act he shall prosecute the party or parties thus reported; but it shall be the duty of said secretary, upon thus ascertaining any violation of this act, to forthwith notify the manufacturer, importer, or dealer in writing, and give him not less than thirty days thereafter in which to comply with the requirements of this article; but there shall be no prosecution in relation to the quality of any concentrated commercial feeding-stuff if the same shall be found substantially equivalent to the certified statement named in section 3 of this article.

SECT. 9. This act shall take effect December first, nineteen hundred and one.

The conditions underlying the feeding-stuffs business is improving. More good feeds have been inspected than during any previous year. There is evidence that the consumers of feeding-stuffs are becoming more exacting and are scrutinizing the brands offered for sale more closely than ever before. The consumer and honest manufacturer are entitled to more protection than they now receive under our present law. The manufacturer should be required to guarantee the ingredients from which a feed is made. Not all proteins have the same digestibility or nutritive value. The same may be said of the other feed constituents. If we know the source from which these constituents come, it is a simple matter to find their digestibility from the tables in this report and in text books on

feeds and feeding. With all this information at hand, the dealer and consumer can quickly decide whether a particular feed is or is not suitable for their needs.

We note the feed sold last year under the name of "Sterling Mixed Feed" has reappeared under the abbreviated name of "Sterling Feed." We also note a similar feed sold under the name of "Blue Grass Feed." The first of these is manufactured in Indiana and the other in Kentucky. Among other things, these feeds contain about 30 per cent of ground corn cobs and are masked largely with wheat by-products. These feeds were offered for about the same price as good wheat bran.

The market value of corn cobs is probably one-third that of wheat bran. Their selling price is greatly enhanced when mixed with other by-products. These feeds are not the only ones which contain very inferior by-products, but they are pointed out because the ingredients may be easily identified with the unaided eye. These brands are within our state law in every respect. They are named properly and meet their respective guarantees. Inferior by-products must carry freight charges and selling commissions which tend to make them relatively still less valuable to the consumer.

The following tables show the average composition and digestibility of the more common feeding-stuffs.

## TABLE NO. 1.

### Average Composition of Feeding-stuffs—Per Cent.

(Henry's, Jordan's and Lindsay's Compilations.)

| | Dry Matter | Water | Ash | Protein | Fat | Carbohydrates Nitrogen Fibre | Free Ext'ct |
|---|---|---|---|---|---|---|---|
| Corn | 89.4 | 10.6 | 1.5 | 10.3 | 5.0 | 2.2 | 70.4 |
| Corn Meal | 85.0 | 15.0 | 1.4 | 9.2 | 3.8 | 1.9 | 68.7 |
| Corn Bran | 90.6 | 9.4 | 1.2 | 11.2 | 6.2 | 11.9 | 60.1 |
| Corn Chops | 87.2 | 12.3 | 1.5 | 9.8 | 4.4 | 2.0 | 69.5 |
| Hominy Meal | 90.4 | 9.6 | 2.7 | 10.5 | 8.0 | 4.9 | 64.3 |
| Gluten Feed | 90.8 | 9.2 | 2.0 | 25.0 | 3.5 | 6.8 | 53.5 |
| Corn and Cob Meal | 84.9 | 15.1 | 1.5 | 8.5 | 3.5 | 6.6 | 64.8 |
| Corn Cob | 89.3 | 10.7 | 1.4 | 2.4 | 0.5 | 30.1 | 54.9 |
| Oats | 89.6 | 10.4 | 3.2 | 11.4 | 4.8 | 10.8 | 59.4 |
| Oat Middlings | 91.2 | 8.8 | 4.5 | 16.2 | 6.9 | 7.1 | 56.5 |
| Oat Feed | 93.0 | 7.0 | 5.3 | 8.0 | 2.9 | 21.5 | 55.3 |
| Wheat | 89.5 | 10.5 | 1.8 | 11.9 | 2.1 | 1.8 | 71.9 |
| Wheat Bran | 88.1 | 11.9 | 5.8 | 15.4 | 4.0 | 9.0 | 53.9 |
| Wheat Middlings (shorts) | 88.8 | 11.2 | 4.4 | 16.9 | 5.1 | 6.2 | 56.2 |
| Flour Middlings | 90.0 | 10.0 | 3.2 | 19.2 | 4.8 | 3.2 | 59.6 |
| Shipstuff | 89.1 | 10.9 | 5.6 | 16.3 | 4.6 | 7.5 | 55.1 |
| Barley | 89.2 | 10.8 | 2.5 | 12.0 | 1.8 | 4.2 | 68.7 |
| Buckwheat | 86.6 | 13.4 | 2.0 | 10.8 | 2.4 | 11.7 | 59.7 |
| Buckwheat Feed | 88.4 | 11.6 | 3.9 | 18.3 | 4.9 | 19.2 | 42.1 |
| Brewers' Dried Grains | 91.3 | 8.7 | 3.7 | 25.0 | 6.7 | 13.6 | 42.3 |
| Distillers' Dried Grains | 92.4 | 7.6 | 2.0 | 31.2 | 12.2 | 11.6 | 35.4 |
| Malt Sprouts | 90.5 | 9.5 | 6.1 | 26.3 | 1.6 | 11.6 | 44.9 |
| Flax Seed | 90.8 | 9.2 | 4.3 | 22.6 | 33.7 | 7.1 | 23.2 |
| Linseed Meal (O. proc's) | 90.2 | 9.8 | 5.5 | 33.9 | 7.8 | 7.3 | 35.7 |
| Linseed Meal (N. proc's) | 91.0 | 9.0 | 5.5 | 37.5 | 2.0 | 8.9 | 36.4 |
| Cotton Seed | 89.7 | 10.3 | 3.5 | 18.4 | 19.9 | 23.2 | 24.7 |
| Cotton Seed Meal | 93.0 | 7.0 | 6.6 | 45.3 | 10.2 | 6.3 | 24.6 |
| Alfalfa Hay | 91.6 | 8.4 | 7.4 | 14.3 | 2.2 | 25.0 | 42.7 |
| Dried Beet Pulp | 91.6 | 8.4 | 4.5 | 8.1 | 0.7 | 17.5 | 60.8 |
| Meat Scraps | 89.3 | 10.7 | 4.1 | 71.2 | 13.7 | ... | 0.3 |
| Molasses Feed | 89.6 | 10.4 | 6.5 | 17.1 | 2.9 | 11.9 | 51.2 |

TABLE NO. 2.

AVERAGE DIGESTIBLE NUTRIENTS OF FEEDS—PER CENT.

(Henry's, Jordan's and Lindsay's Compilations.)

| | Dry Matter | Protein | Fat | Carbohydrates Fibre | Nitrogen Free Extract |
|---|---|---|---|---|---|
| Corn | 81.35 | 7.83 | 4.30 | 1.28 | 65.47 |
| Corn Meal | 74.8 | 6.07 | 3.46 | . . . | 63.29 |
| Corn Bran | 63.42 | 6.05 | 4.74 | 6.78 | 45.68 |
| Corn Chops | 78.00 | 6.95 | 3.88 | 1.25 | 64.38 |
| Hominy Meal | 74.13 | 6.83 | 7.36 | 3.28 | 57.23 |
| Gluten Feed | 79.0 | 21.25 | 2.87 | 5.17 | 47.62 |
| Corn and Cob Meal | 67.07 | 4.42 | 2.94 | 2.97 | 57.02 |
| Corn Cob | 52.67 | 0.4 | 0.25 | 19.57 | 32.94 |
| Oats | 62.72 | 8.78 | 4.27 | 3.35 | 45.74 |
| Oat Middlings | 82.08 | 13.12 | 6.49 | 3.48 | 54.24 |
| Oat Feed | 37.20 | 5.20 | 2.61 | 1.88 | 23.23 |
| Wheat | . . . . | 10.2 | 1.7 | 69.2 | |
| Wheat Bran | 58.15 | 11.86 | 2.5 | 3.69 | 38.27 |
| Wheat Middlings (shorts) | . . . . | 13.0 | 4.5 | 1.86 | 43.84 |
| Flour Middlings | 73.8 | 16.9 | 4.1 | 1.15 | 52.45 |
| Shipstuff | 65.04 | 12.7 | 4.0 | 4.65 | 42.43 |
| Barley | 76.71 | 8.4 | 1.6 | 2.10 | 63.2 |
| Buckwheat | 61.49 | 8.1 | 2.4 | 2.81 | 45.37 |
| Buckwheat Feed | . . . . | 15.6 | 4.4 | 38.2 | |
| Brewers' Dried Grains | 56.61 | 20.0 | 6.0 | 6.8 | 25.38 |
| Distillers' Dried Grains | 73.00 | 22.78 | 11.6 | 11.02 | 28.67 |
| Malt Sprouts | 70.59 | 20.3 | 1.4 | 9.63 | 36.37 |
| Flax Seed | 69.92 | 20.6 | 29.0 | 4.26 | 12.76 |
| Linseed Meal (O. proc's) | 71.26 | 30.2 | 6.9 | 4.16 | 27.85 |
| Linseed Meal (N. proc's) | 74.62 | 31.5 | 2.4 | 6.59 | 29.12 |
| Cotton Seed | 59.2 | 12.5 | 17.3 | 17.63 | 12.35 |
| Cotton Seed Meal | 71.61 | 37.6 | 9.6 | 2.21 | 19.19 |
| Alfalfa Hay | . . . . | 10.44 | 0.31 | 10.0 | 29.89 |
| Dried Beet Pulp | 70.53 | 4.1 | . . . . | 12.6 | 52.29 |
| Meat Scraps | 83.05 | 66.2 | 13.4 | . . . . | . . . . |
| Molasses Feed | 64.51 | 10.8 | 2.2 | 6.55 | 41.47 |

## The Constituents of Feeding-stuffs.

In the complete chemical analysis of a feeding-stuff the following determinations are made: moisture, ash, protein, fat, fibre, and nitrogen-free extract. The value of a feeding-stuff is generally based on the amount of protein and fat it contains. For that reason these two constituents are often the only ones determined. We are, however, beginning to realize that while the amount of protein and fat is important, at the same time the carbohydrates are also very important and in many classes of feeding-stuffs form the chief source of value.

### MOISTURE.

Water is present to some extent in all classes of feeds. The per cent in most cases varies between five and fifteen. The amount varies with the nature of the feed, the process of manufacture, and the manner of storage.

### ASH.

The ash of a feed is the residue left after burning off the organic matter. It represents the inorganic or mineral constituent of the plant. This part of the feed furnishes the material for the bones of the animal.

### CRUDE PROTEIN.

By crude protein is meant that portion of a feeding-stuff which contains nitrogen. Nitrogenous feeds build up muscular tissue and the proteins are of the greatest importance in determining the value of a feed. Most of the crude protein in the plant is found at the point of growth, or in the leaves and seeds.

### CRUDE FAT.

The term crude fat is rather arbitrarily used to include all the substances of the feed soluble in dry ether or similar solvents. They are the pure fats, such as cottonseed oil, linseed oil, etc., and the waxes, resins, chlorophyl, etc. These latter substances are generally so small in amount that for practical purposes the ether extract of a feed represents the amount of fat which it contains. The fats are readily digested and rank next to protein in value.

### FIBRE.

The crude fibre in a feeding-stuff is that portion which goes to make up the cell-walls and structural material of the plant. It is fairly indigestible and in general a *high* percentage of crude fibre indicates a *low-grade* feed.

### NITROGEN-FREE EXTRACT.

The nitrogen-free extract is that portion of the feed readily extracted by water or dilute acids and composed of non-nitrogenous materials. The principal substances included under the term are the starches and sugars.

### CARBOHYDRATES.

The term carbohydrates is sometimes used in speaking of feeding-stuffs. It is generally used to include both crude fibre and nitrogen-free extract. A feeding-stuff which contains small amounts of moisture, ash and crude fibre must be classed as high grade, if digestible. When these constituents are present in small amounts the total amount of the valuable constituents—protein, fat and nitrogen-free extract—must be high.

## The Value of a Chemical Examination of Commercial Feeding-stuffs.

The chemical analysis of feeding-stuffs is valuable in many ways, chief of which are the following:

1. It shows whether or not the guarantees of the manufacturer are correct.
2. It protects the buyer against the unscrupulous manufacturer or retailer.
3. It aids the buyer in deciding money values in purchasing feed.
4. It affords a clue as to the nature of the constituents of the feed.
5. It furnishes data for making up any desired feeding ration.
6. It enables the consumer to decide whether it is a useful feed for his particular purpose.

The following definitions are given for the use of the consumer and represent the terms used for the particular feeding-stuffs by the general trade.

## General Definitions.

### COTTONSEED MEAL.

Cottonseed meal is the meal obtained from the cottonseed kernel after the extraction of the oil. The following standard classification adopted by the Inter-State Cottonseed Crushers' Association will interest the buyer of cottonseed meal:

"*Choice cottonseed meal* must be finely ground, perfectly sound and sweet in odor, yellow, free from excess of lint, and by analysis must contain forty-nine per cent of combined protein and fat."

"*Prime cottonseed meal* must be finely ground, of sweet odor, reasonably bright in color, yellow, not brown or red-

dish, free from lint, and contain at least forty-six per cent of combined protein and fat."

*Good cottonseed meal* must be finely ground, of sweet odor, reasonably bright in color, and by analysis must contain at least forty-three per cent of combined protein and fat.

### LINSEED MEAL.

Linseed meal, oil meal, or flaxseed meal is the ground residue from the extraction of oil from flaxseed. The oil is extracted by two processes, known as the old process and the new process. In the old process the oil is simply expressed from the seed by hydraulic pressure. In the new process naphtha or a similar solvent is used to extract the oil. On account of the extraction being more complete when a solvent is used, the new process generally contains less fat than the old process, while they contain about the same per cent protein.

### WHEAT PRODUCTS.

*Wheat bran* is the coarse outer covering of the wheat berry. It contains much of the fibrous material of the grain, but is rich in protein.

*Middlings or shorts.* These terms have generally the same meaning in the trade, and are the fine particles of the outer bran as well as considerable starchy matter. They are the intermediate product between bran and flour.

*Red dog* is a low-grade wheat flour containing the finer particles of bran.*

*Wheat mixed feed* or shipstuff is a mixture of the by-products from the milling of the wheat berry.*

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* Definitions marked (*) are those adopted by the Association of Feed Control Officials of the United States.

*Mixed feed.* The term mixed feed has been so generally used to mean a mixture of wheat products that it is practically a misrepresentation to use the term to mean a mixture of other cereals. A feed carrying less than fifteen per cent protein and four per cent fat cannot be a good mixed feed.

### CORN PRODUCTS.

*Corn bran* is the outer coating of the corn kernel.* It has a low feeding value.

*Corn and cob meal* is the ground whole ear of corn. In this case the cobs are not considered an adulterant.

*Gluten meal* is a product obtained in the manufacture of starch and glucose from corn. It is the flinty portion of the kernel which lies in its outer circumference just beneath the hull.*

*Gluten feed* is a product obtained in the manufacture of starch and glucose from corn and is a mixture of gluten meal and corn bran to which may be added the residue resulting from the evaporation of the so-called "steep water." *

*Corn feed meal* is the siftings obtained in the manufacture of cracked corn and table meal made from the whole grain.*

*Hominy meal, feed or chop* is the bran and germs of the corn kernel and may contain a part of the starchy portion of the kernel.*

### DISTILLERY AND BREWERY BY-PRODUCTS.

*Distillers' dried grains* are the dried residue from cereals obtained in the manufacture of alcohol and distilled liquors.*

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*Brewers' dried grains* are dried barley grains after they have been malted and the soluble sugar and dextrin extracted.

*Malt sprouts* are the sprouts of the barley grain.*

MISCELLANEOUS PRODUCTS.

*Alfalfa meal* is the entire alfalfa hay ground and does not contain an admixture of ground alfalfa straw or other materials.*

*Meat meal* is finely ground beef scraps.*

*Buckwheat shorts or middlings* are that portion of the buckwheat grain immediately inside of the hull after separation from the flour.*

*Molasses feeds* are generally a mixture of some filler such as oat hulls, oat clippings, flax bran, or grain screenings with molasses and a concentrated feed, such as cottonseed meal, brewers' grains, or malt sprouts.

*Filler* is a term used to designate certain by-products generally of little feeding value used to give weight and bulk to concentrated feeds in the manufacture of compounded feeds. Among the materials commonly used as fillers are: ground corn cobs, peanut hulls, oat hulls, cotton seed hulls, grain screenings, flax plant stems and pods, rice hulls, etc. These materials are ground so fine that their presence is discovered only by careful examination, sometimes only with the aid of a microscope. Most fillers contain relatively small amounts of crude protein and crude fat and large amounts of crude fibre. The presence of a filler in some cases may actually decrease the value of the concentrates present.

*Compounded feeds* are those feeds bearing trade names which are not descriptive in any way of the materials which

* Definitions marked (*) are those adopted by the Association of Feed Control Officials of the United States.

have been used in their manufacture. They may contain any mixture of stock feed materials and therefore cannot be compared with standards of average composition. They often represent various industrial by-products such, for example, as are obtained in the manufacture of breakfast foods.

The writers wish to here acknowledge the assistance rendered by Messrs. D. B. Keyes, G. F. Lane, M. H. Broggini, G. L. Ham and H. M. Eastman in preparing the following analytical data.

| Name of Sample. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| WHEAT FEEDS. | | | | | | | | |
| Amco Mixed Feed | Amendt Milling Co | Monroe, Mich | 17.34 | 18 80 | 4.49 | 4.40 | ..... | 7.50 |
| Middlings | The Ansted & Burke Co | Springfield, Ohio | 16.95 | 14 50 | 4.91 | 4.00 | ..... | 7.50 |
| Mixed Feed | The Ansted & Burke Co | Springfield, Ohio | 16.20 | 14.50 | 4.31 | 3.50 | ..... | 11.50 |
| Atlas Bran | Atlas Flour Mills | Milwaukee, Wis | 16 25 | 15.00 | 5 05 | 3.50 | ..... | 12.00 |
| Atlas Extra Flour Middlings | Atlas Flour Mills | Milwaukee, Wis | 18 52 | 16.00 | 5.23 | 4.50 | ..... | 8.00 |
| Badger Standard Middlings | Badger-Crittenden Mlg. Co | Milwaukee, Wis | 17.12 | 17.00 | 4.87 | 4 00 | ..... | 8.50 |
| Fancy Winter Mixed Feed | E. W. Bailey & Co | Montpelier, Vt | 16.85 | 16.00 | 4.67 | 3.75 | ..... | 8.50 |
| Ballard's Bran | Ballard & Ballard Co | Louisville, Ky | 15 76 | 14.50 | 4 32 | 4.10 | ..... | 9.00 |
| Banner Mixed Feed | Banner Milling Co | Buffalo, N. Y | 17.43 | ..... | 5.42 | ..... | 6 80 | ..... |
| Bran Flakes | Barber Milling Co | Minneapolis, Minn | 16.87 | 13.00 | 5.25 | 4.00 | 10.17 | 10.00 |
| Fancy Low Grade | Barber Milling Co | Minneapolis, Minn | 18 00 | 18.00 | 5.07 | 5 00 | ..... | 4.00 |
| Fancy White Middlings | Barber Milling Co | Minneapolis, Minn | 18.13 | 17.00 | 5.35 | 5.00 | ..... | 6.00 |
| White Satin Mixed Feed | Barber Milling Co | Minneapolis, Minn | 17 08 | 16.00 | 5.13 | 4 50 | ..... | 9.00 |
| Winona Mixed Feed | Bay State Milling Co | Winona, Minn | 17.38 | 17.00 | 5.44 | 5.00 | ..... | 10 50 |
| Commander Bran | Commander Mill Co | Minneapolis, Minn | 16.81 | 14.00 | 5.87 | 4.00 | ..... | 11.00 |
| Winter Wheat Bran | William A. Coombs Mlg. Co | Coldwater, Mich | 14 45 | 14.00 | 4.21 | 3.00 | ..... | ..... |
| Winter Wheat Middlings | William A. Coombs Mlg. Co | Coldwater, Mich | 16.29 | 15 00 | 4.46 | 3.00 | ..... | ..... |
| Winter Wheat Mixed Feed | William A. Coombs Mlg. Co | Coldwater, Mich | 16.16 | 15.00 | 5.51 | 3 00 | ..... | ..... |
| Bran | (Sold by) Charles M. Cox Co | Boston, Mass | 15.72 | 14.50 | 4.79 | 4.00 | ..... | 10.00 |
| Dudley Bran | Charles M. Cox Co | Boston, Mass | 15 69 | 15 50 | 5.25 | 4.00 | 10 08 | 9.00 |
| Monogram Fancy Bran | Charles M. Cox Co | Boston, Mass | 15.95 | 15.00 | 5.12 | 4.00 | ..... | 10.00 |
| Paragon Mixed Feed | Charles M. Cox Co | Boston, Mass | 16 03 | 15.50 | 4.84 | 4.00 | ..... | 10 00 |
| Wirthmore Middlings | Charles M. Cox Co | Boston, Mass | 17.52 | 15.00 | 5.20 | 4.00 | ..... | ..... |
| Wirthmore Wheat Feed | Charles M. Cox Co | Boston, Mass | 16.42 | 16.00 | 5.29 | 4.00 | 7.60 | 7.00 |
| Pure Wheat Jersey Bran | George C. Christian | Minneapolis, Minn | 15.89 | 13.00 | 5.05 | 4.00 | ..... | 11.50 |
| Madelia Roller Mills Flour Middlings | C. S. Cristensen Co | Madelia, Minn | 19.24 | 14.25 | 5 68 | 3.00 | ..... | 5.35 |
| Coarse Bran | Crookston Milling Co | Crookston, Minn | 15.72 | 14.90 | 4.80 | 3.10 | ..... | 11.10 |
| Boston Mixed Feed | Duluth Superior Milling Co | Duluth, Minn | 16.95 | 16.00 | 6.06 | 4.50 | ..... | 8.50 |
| Pure Wheat Bran | B. A. Eckhart Milling Co | Chicago, Ill | 17.73 | 14.00 | 4.67 | 3.00 | ..... | ..... |
| Eaco Winged Horse Bran | Everett, Augenbaugh & Co | Waseco, Minn | 15.50 | 14.00 | 4.44 | 3.00 | ..... | 12.00 |
| Eaco Winged Horse Mixed Feed | Everett, Augenbaugh & Co | Waseco, Minn | 16.95 | 15 00 | 5.90 | 3.00 | ..... | 12.00 |
| Lucky Flour Middlings | Federal Milling Co | Lockport, N. Y | 17.17 | 15.00 | 4.89 | 4.00 | ..... | 10.00 |

| WHEAT FEEDS.—*Continued.* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lucky Spring Bran | Federal Milling Co | Lockport, N. Y | 17.12 | 17.00 | 5.48 | 4.50 | | 9.00 |
| Lucky Spring Flour Middlings | Federal Milling Co | Lockport, N. Y | 17.64 | 18 00 | 5.69 | 5 00 | | 9.00 |
| Sphinx Fancy Flour Middlings | Federal Milling Co | Lockport, N. Y | 15.77 | 10 50 | 4.54 | 4.00 | | 9.00 |
| Lucky Winter Mixed Feed | Federal Milling Co | Lockport, N. Y | 16.16 | 14.00 | 4.76 | 4.00 | 8.19 | 10.00 |
| Snowball White Middlings | The Gardiner Mills | Hastings, Minn | 17.95 | 15.00 | 5.23 | 4.00 | | 7.50 |
| Berlin Mixed Feed | John Goebel & Co | Berlin, N. H | 16.64 | | 4.84 | | | |
| Bran | Grafton Roller Mill Co | Grafton, N. D | 14.20 | | 5.01 | | | |
| Middlings | Grafton Roller Mill Co | Grafton, N. D | 18.57 | | 5.35 | | | |
| Grafton Mixed Feed | Grafton Roller Mill Co | Grafton, N. D | 16.47 | 15 50 | 5.54 | 4.50 | | 11.90 |
| Daisy Dairy Feed | The Great Western Cereal Co | Chicago, Ill | 17.00 | 15 00 | 4.47 | 3.00 | 15.82 | 12.00 |
| Xtragood Mixed Feed | Griswold & Mackinnon | St. Johnsbury, Vt | 15.24 | 16.00 | 5.26 | 4.00 | | 7.50 |
| Acme Mixed Feed | J. Hale & Sons | Lyons, Mich | 14.06 | | 4.00 | | 7.82 | |
| Mixed Feed | Hart Milling and Power Co | Flushing, Mich | 15 06 | 15.00 | 4.62 | 4.25 | | 8.67 |
| Purity Mixed Feed | William S. Hills Co | Boston, Mass | 15.85 | 15 00 | 4.15 | 4.00 | | 10.00 |
| Middlings | J. A. Hinds & Co | Rochester, N. Y | 19.26 | 17.50 | 7.21 | 5.30 | | 7.50 |
| White Middlings | J. A. Hinds & Co | Rochester, N. Y | 15.46 | | 3.58 | | | |
| Pure Wheat Middlings | John Hoffer Flouring Mill Co | Steelton, Pa | 15.46 | | 4.10 | | | |
| Pure Winter Shorts | John Hoffer Flouring Mill Co | Steelton, Pa | 17.99 | | 5.66 | | | |
| Standard Fine Middlings | Hubbard Milling Co | Mankato, Minn | 17.64 | 14.50 | 5.93 | 5.10 | | 10 00 |
| Winter Bran | Hunter-Robinson-Wenz Mlg Co | St. Louis, Mo | 16.86 | 14 50 | 4.48 | 4.00 | | 9.50 |
| Fine White Middlings | Huron Milling Co | Harb'r Beach, Mich | 13 62 | 13.00 | 3.24 | 3.50 | | 2.50 |
| Mixed Feed | Huron Milling Co | Harb'r Beach, Mich | 14.45 | 12.00 | 4.68 | 4.60 | | 5.85 |
| Bran | W. J. Jennison Co | Minneapolis, Minn | 16.81 | 15 00 | 5 28 | 4.00 | | 10.00 |
| Flour Middlings | W. J. Jennison Co | Minneapolis, Minn | 18.92 | 17.00 | 4.87 | 4.50 | | 5.50 |
| Anchor Bran | Kemper Mill and Elevator Co | Kansas City, Mo | 14.79 | 14.50 | 4.12 | 4.00 | 9.90 | 10.00 |
| Anchor Mixed Feed | Kemper Mill and Elevator Co | Kansas City, Mo | 19.57 | 16.00 | 4 10 | 4.00 | | 10.00 |
| Carnation Grey Middlings | Kemper Mill and Elevator Co | Kansas City, Mo | 17.91 | 16.00 | 4.27 | 4.30 | | 8.00 |
| Buckwheat Middlings | Larrowe Milling Co | Detroit, Mich | 12 94 | | 5.21 | | 24.89 | |
| Snowflake Bran | Lawrenceburg Roller Mills Co | Lawrenceburg, Ind | 14.93 | 14.20 | 3.80 | 3 80 | 9.43 | 9.50 |
| Snowflake Middlings | Lawrenceburg Roller Mills Co | Lawrenceburg, Ind | 17.52 | 16.00 | 5.13 | 5 10 | | 6.00 |
| Snowflake Mixed Feed | Lawrenceburg Roller Mills Co | Lawrenceburg, Ind | 16.38 | 15.20 | 4.67 | 4.30 | | 8.00 |
| Thoroughbred Feed | Lexington Roller Mills Co | Lexington, Ky | 16.29 | 16 00 | 4.45 | 4.00 | | 9.10 |
| Pure Wheat Bran | Lidgerwood Mills Co | Lidgerwood, N. D. | 15.46 | 15.30 | 4.60 | 4.10 | | 13.50 |
| Elmco Wheat Fancy Bran | Listman Mills Co | La Crosse, Wis | 15 98 | 15.21 | 5.18 | 4.12 | 9.30 | 12.03 |
| Elmco Wheat Fancy Mixed Feed | Listman Mills Co | La Crosse, Wis | 16 95 | 15.71 | 4.74 | 4.14 | | 6.33 |
| Waseo Bran | Lyon & Greenlief | Wanseo, Ohio | 14.93 | 14.50 | 4.19 | 4.00 | | 9.50 |
| Waseo Mixed Feed | Lyon & Greenlief | Wanseo, Ohio | 15.77 | 15 00 | 4.26 | 4.00 | | 8.00 |
| Wheat Bran | The J. C. Lysle Milling Co | Leavenworth, Kan | 15.24 | 15.00 | 4.20 | 4 00 | | 10.00 |
| Pure Wheat Bran | Maney Milling Co | Omaha, Nebr | 16 99 | 14.00 | 5.00 | 4.00 | 9.80 | 11.00 |
| Bran | Maple Leaf Milling Co | Canada | 15.02 | | 5 28 | | | |
| Rex Middlings | Maple Leaf Milling Co | Canada | 16.50 | | 4.99 | | | |
| Shorts | Marshall Milling Co | Marshall, Minn | 19.09 | 17.00 | 6.15 | 5.04 | | 9.44 |
| Pennant Mixed Feed | National Milling Co | Toledo, Ohio | 16 95 | 16.00 | 4.86 | 3.75 | | 8.50 |

| Name of Sample. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| WHEAT FEEDS.--*Continued.* | | | | | | | | |
| Pure Wheat Bran | National Milling Co | Toledo, Ohio | 15.72 | ..... | 5.01 | ..... | ..... | ..... |
| Osota Mixed Feed | National Milling Co | Toledo, Ohio | 17.25 | 17.00 | 4.71 | 4.50 | ..... | 8.00 |
| Powerful Mixed Feed | The New England Flour Co | Boston, Mass | 17.69 | 19.00 | 5.00 | 3.00 | ..... | 10.00 |
| Powerful Standard Bran | The New England Flour Co | Boston, Mass | 16.68 | 14.00 | 4.91 | 3.00 | ..... | 12.00 |
| Powerful Standard Middlings | The New England Flour Co | Boston, Mass | 16.99 | 16.00 | 5.62 | 4.00 | ..... | 10.00 |
| Seal of Minnesota Bran | New Prague Flouring Mill Co. | New Prague, Minn | 16.90 | 13.50 | 5.24 | 4.00 | ..... | 12.50 |
| Seal of Minnesota Fancy Flour Middlings | New Prague Flouring Mill Co. | New Prague, Minn | 17.60 | 17.50 | 4.72 | 4.70 | ..... | 4.70 |
| Mixed Feed | The Northwestern Con. Mlg.Co | Minneapolis, Minn | 17.43 | 15.00 | 5.26 | 4.50 | ..... | 10.00 |
| Planet Feed | The Northwestern Con. Mlg.Co | Minneapolis, Minn | 18.74 | 15.00 | 6.27 | 4.00 | ..... | 8.00 |
| Pure Wheat Flour Middlings | The Northwestern Con. Mlg Co | Minneapolis, Minn | 19.44 | 15.50 | 5.53 | 4.50 | ..... | 8.00 |
| Pure Wheat Middlings | The Northwestern Con. Mlg.Co | Minneapolis, Minn | 16.99 | 15.00 | 6.19 | 4.50 | ..... | 10.00 |
| XXX Comet | The Northwestern Con. Mlg.Co | Minneapolis, Minn | 19.72 | 16.50 | 5.92 | 4.00 | ..... | 3.00 |
| Fancy Country Middlings | Northwestern Milling Co | Little Falls, Minn. | 17.22 | 17.00 | 5.51 | 4.90 | ..... | ..... |
| Fancy Mixed Feed | Northwestern Milling Co | Little Falls, Minn. | 18.04 | 14.02 | 5.31 | 4.03 | ..... | 8.00 |
| Fancy Spring Bran | Northwestern Milling Co | Little Falls, Minn. | 15.45 | 12.50 | 4.90 | 3.70 | ..... | ..... |
| Pure Wheat Bran | The N. W. Consol. Mlg. Co | Minneapolis, Minn | 16.03 | 14.50 | 5.63 | 4.00 | 11.07 | 11.00 |
| Pillsbury's Pure and Unadulterated Fancy Mixed Feed | Pillsbury's Milling Co | Minneapolis, Minn | 17.25 | 16.00 | 4.96 | 4.50 | ..... | 8.00 |
| Pillsbury's Pure and Unadulterated Wheat Flour A. Middlings | Pillsbury's Milling Co | Minneapolis, Minn | 17.03 | 15.00 | 4.71 | 4.50 | ..... | 6.00 |
| Pillsbury's Pure and Unadulterated Wheat B. Middlings | Pillsbury's Milling Co | Minneapolis, Minn | 17.17 | 15.00 | 5.25 | 4.00 | ..... | 8.00 |
| Pillsbury's Wheat Bran | Pillsbury's Milling Co | Minneapolis, Minn | 15.55 | 14.50 | 4.43 | 4.00 | ..... | 11.00 |
| Pillsbury's XX Daisy | Pillsbury's Milling Co | Minneapolis, Minn | 19.23 | 16.00 | 4.93 | 4.50 | ..... | 11.00 |
| Bran | Pipestone Milling Co | Pipestone, Minn | 16.54 | 14.20 | 5.01 | 4.00 | ..... | 10.30 |
| Standard Middlings | Pipestone Milling Co | Pipestone, Minn | 17.51 | 17.00 | 6.83 | 5.80 | ..... | 7.00 |
| Porter's Pure and Unadulterated Wheat Bran | Porter Milling Co | Winona, Minn | 16.25 | 14.50 | 4.83 | 4.00 | ..... | 11.60 |
| Porter's Pure and Unadulterated Wheat Middlings | Porter Milling Co | Winona, Minn | 19.83 | 15.00 | 6.19 | 4.50 | ..... | 10.00 |
| Porter's Pure and Unadulterated Wheat Red Dog Flour | Porter Milling Co | Winona, Minn | 19.48 | 18.50 | 5.92 | 4.00 | ..... | 3.00 |

| WHEAT FEEDS.—*Continued.* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Champion Mixed Feed | Portland Milling Co. | Portland, Mich. | 15.76 | 15.84 | 4 93 | 4.15 | ..... | 9.40 |
| Buckeye Mixed Feed | The Quaker Oats Co. | Chicago, Ill. | 16.86 | 15.50 | 4 61 | 4 50 | ..... | 8.00 |
| Choice Bran | Rush City Milling Co | Rush City, Minn. | 15.16 | 15.00 | 4.69 | 4.00 | ..... | 10.60 |
| Bran | Russel-Miller Milling Co. | Minneapolis, Minn | 16.33 | 13 00 | 5 12 | 4.00 | ..... | 11.00 |
| Flour Middlings | Russel-Miller Milling Co. | Minneapolis, Minn | 16.26 | 16.00 | 5.21 | 5 00 | ..... | 6.00 |
| Occident Mixed Feed | Russel-Miller Milling Co. | Minneapolis, Minn | 17.43 | 15 50 | 5 50 | 4 50 | ..... | 10.00 |
| Occident Wheat Feed | Russel-Miller Milling Co. | Minneapolis, Minn | 16 85 | 15 00 | 5.39 | 4 50 | 7.60 | 10 00 |
| Regular Wheat Feed | Russel-Miller Milling Co. | Minneapolis, Minn | 18 39 | 15.00 | 5.15 | 4 50 | ..... | 10.00 |
| Standard Middlings | Russel-Miller Milling Co. | Minneapolis, Minn | 17.52 | 15.00 | 5.72 | 4.00 | ..... | 8.00 |
| Gold Mine Mixed Feed | Sheffield-King Milling Co. | Minneapolis, Minn | 16.21 | 15 00 | 5.47 | 4.99 | 7.95 | 8.00 |
| Shredded Wheat Waste for Poultry | The Shredded Wheat Co. | Niagara Falls, N.Y. | 12.48 | 10 00 | 2 00 | 1.50 | ..... | 2 00 |
| Flour Middlings | Sleepy Eye Flour Mills Co. | Minneapolis, Minn | 18.52 | 17.50 | 5.92 | 4 00 | ..... | 7 70 |
| Pure Wheat Middlings | Sleepy Eye Flour Mills Co. | Minneapolis, Minn | 17.43 | 17 20 | 5.82 | 4 30 | ..... | 8 30 |
| Try Me Winter Mixed Feed | Sparks Milling Co. | Alton, Ill. | 17 52 | 16 00 | 4.16 | 4.00 | ..... | 8.00 |
| Pure Wheat Product Rich Bran, Mill Run or Mixed Feed | Stonard-Tilton Milling Co. | St. Louis, Mo. | 18.65 | 14 00 | 4 77 | 4 00 | ..... | ..... |
| Bran | F. W. Stock & Sons | Hillsdale, Mich. | 15.72 | 15 50 | 4 18 | 3 00 | ..... | 9.50 |
| Middlings | F. W. Stock & Sons | Hillsdale, Mich. | 17.01 | 17.00 | 5.15 | 4.50 | ..... | 6.00 |
| Monarch Wheat Feed | F. W. Stock & Sons | Hillsdale, Mich. | 17.82 | 17.00 | 4.86 | 4.50 | ..... | 9.00 |
| Superior Pure Wheat Feed | F. W. Stock & Sons | Hillsdale, Mich. | 17.03 | 18 00 | 4.97 | 5.00 | ..... | 7.00 |
| Stott's Fine White Middlings | David Stott | Detroit, Mich. | 16.05 | 16.00 | 4 69 | 5.00 | ..... | 8.00 |
| Stott's Heavy Pure Mixed Wheat Feed | David Stott | Detroit, Mich. | 16.32 | 16.00 | 5 03 | 5.00 | ..... | 7 00 |
| Stott's Honest Mixed Feed | David Stott | Detroit, Mich. | 16.50 | 16 50 | 5 30 | 5 00 | 7.57 | 8 00 |
| Stott's Pure Spring Wheat Bran | David Stott | Detroit, Mich. | 17.25 | 16.00 | 5.13 | 4.50 | ..... | 10.00 |
| Stott's Pennant Pure Winter Wheat Middlings | David Stott | Detroit, Mich. | 16.99 | 17 00 | 5.43 | 5 50 | ..... | 7 00 |
| Stott's Pure Winter Wheat Bran | David Stott | Detroit, Mich. | 15.67 | 16 00 | 4 16 | 4.00 | 10.11 | 10.00 |
| Bran | Stratton & Co. | Concord, N. H. | 17 87 | ..... | 5.31 | ..... | ..... | ..... |
| Middlings | Stratton & Co. | Concord, N. H. | 14.88 | ..... | 4 30 | ..... | ..... | ..... |
| Stratton's Fancy Stock Feed | Stratton & Co. | Concord, N. H. | 10 29 | 10 00 | 6.63 | 3.25 | ..... | 9.00 |
| Stratton's Mixed Feed | Stratton & Co. | Concord, N. H. | 14 93 | 15 78 | 5 03 | 4.74 | ..... | 9 00 |
| Pure Wheat Bran | Tennant & Hoyt Co. | Lake City, Mich. | 15.98 | 13.20 | 5.30 | 4.90 | ..... | 13.10 |
| Mixed Wheat Feed | Thornton & Chester | Buffalo, N. Y. | 17.52 | 14 00 | 5 06 | 3.00 | ..... | ..... |
| Wheat Bran | George Urban Milling Co. | Buffalo, N. Y. | 17.00 | 15.00 | 5.34 | 4 00 | ..... | 11.50 |
| Farmers' Favorite Choice Wheat Bran | Valley City Milling Co. | Grand Rapids, Mich | 16.07 | 17.75 | 4.67 | 3.43 | ..... | 10.93 |
| Farmers' Favorite Choice Wheat Cow Feed | Valley City Milling Co. | Grand Rapids Mich | 16.42 | 14.73 | 5.08 | 4.25 | ..... | 7.50 |
| Farmers' Favorite Choice Wheat Middlings | Valley City Milling Co. | Grand Rapids, Mich | 15 77 | 16.84 | 4 95 | 4.88 | ..... | 8.33 |
| Voigt's Pure Winter Wheat Bran | Voigt Milling Co. | Grand Rapids, Mich | 15.54 | ..... | 4.51 | ..... | ..... | ..... |

| Name of Sample. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| WHEAT FEEDS.—*Continued.* | | | | | | | | |
| Pure Winter Wheat Bran | Voigt Milling Co | Grand Rapids, Mich | 16.07 | ..... | 4.55 | ..... | ..... | ..... |
| Voigt's Pure Middlings | Voigt Milling Co | Grand Rapids, Mich | 15.46 | ..... | 4.74 | ..... | 5.24 | ..... |
| Mill Run Bran Mixed Feed | Waggoner-Gates Mlg. Co. | Independence, Mo. | 15.37 | 15.00 | 4.30 | 3.00 | ..... | 9.00 |
| Washburn-Crosby Co.'s Pure Hard Wheat Coarse Bran | Washburn-Crosby Co. | Minneapolis, Minn | 16.03 | 14.50 | 5.24 | 4.00 | ..... | 11.00 |
| Washburn-Crosby Co.'s Pure Hard Wheat Flour Middlings | Washburn-Crosby Co. | Minneapolis, Minn | 18.08 | 17.00 | 5.19 | 5.00 | ..... | 8.00 |
| Pure Hard Wheat Standard Middlings | Washburn-Crosby Co. | Minneapolis, Minn | 17.69 | 15.00 | 5.35 | 4.00 | ..... | 8.00 |
| Washburn-Crosby Co.'s Pure Hard Wheat Adrian Red Dog Flour | Washburn-Crosby Co. | Minneapolis, Minn | 18.30 | 17.00 | 5.14 | 5.00 | ..... | 4.00 |
| Washburn-Crosby Co.'s Pure Hard Wheat Superior Mixed Feed | Washburn-Crosby Co. | Minneapolis, Minn | 16.42 | 16.00 | 5.33 | 4.50 | ..... | 9.00 |
| Bran | Western Canada Flour Mills Co | Canada | 15.83 | 16.82 | 4.66 | 5.50 | 8.88 | 10.86 |
| Kent Mixed Feed | The Williams Bros. Co. | Kent, Ohio. | 16.38 | 12.00 | 4.77 | 2.00 | ..... | 15.00 |
| Bran | Williston Mills Co. | Williston, N. D. | 17.00 | 16.50 | 4.90 | 4.00 | ..... | 10.20 |

| Name of Brand. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| COMPOUNDED FEEDS. | | | | | | | | |
| "Ubico" Union Grains | J. W. Biles Co. | Cincinnati, Ohio | 24.83 | 24.00 | 7.89 | 7.00 | 9.60 | 9.00 |
| Bufeeco Horse Feed | Buffalo Cereal Co. | Buffalo, N. Y. | 11.30 | 10.00 | 4.50 | 4.00 | 9.26 | 8.00 |
| Bufeeco Stock Feed | Buffalo Cereal Co. | Buffalo, N. Y. | 9.46 | 8.00 | 4.55 | 4.00 | 10.11 | 9.00 |
| Unicorn Dairy Ration | Chapin & Co. | Milwaukee, Wis. | 27.54 | 26.00 | 6.27 | 5.50 | 9.63 | 10.00 |
| Wirthmore Balanced Ration Feed | Charles M. Cox Co. | Boston, Mass | 26.18 | 26.00 | 5.73 | 5.00 | 9.79 | 8.75 |
| Wirthmore Balanced Ration for Milch Cows | Charles M. Cox Co. | Boston, Mass | 26.71 | 25.50 | 6.50 | 5.20 | 9.34 | 9.50 |
| Wirthmore Stock Feed | Charles M. Cox Co. | Boston, Mass | 11.26 | 9.00 | 5.99 | 4.00 | 7.26 | 7.00 |
| Grandin's Stock Feed | D. H. Grandin Milling Co. | Jamestown, N. Y. | 10.73 | 8.50 | 7.60 | 3.50 | 6.22 | 9.00 |
| Xtragood Stock Feed | Griswold & Mackinnon | St. Johnsbury, Vt. | 11.68 | 10.00 | 4.44 | 3.25 | 11.09 | ..... |
| Gwinn's Dairy Feed | Gwinn Milling Co. | Columbus, Ohio | 16.35 | 16.29 | 4.68 | 4.50 | ..... | 7.00 |
| Branning Refuse | George S. Ham | Barrington, N. H. | 13.82 | 12.00 | 5.90 | 5.00 | 9.00 | 9.00 |
| Haskell's Stock Feed | W. H. Haskell & Co. | Toledo, Ohio | 10.38 | 8.00 | 7.79 | 4.00 | 7.06 | 8.00 |
| Haywood's Chickalfa | Byron Haywood | Kansas City, Mo. | 22.02 | 20.00 | 3.31 | 2.00 | 18.05 | 20.00 |
| Purity Horse Feed | William S. Hills Co. | Boston, Mass. | 10.95 | 8.50 | 4.93 | 3.00 | 10.03 | 8.00 |
| Purity Milk Maker | William S. Hills Co. | Boston, Mass. | 25.79 | 25.00 | 8.37 | 8.00 | 12.01 | 10.00 |
| Purity Stock Feed | William S. Hills Co. | Boston, Mass. | 10.03 | 8.00 | 5.28 | 3.00 | 12.28 | 7.00 |
| Monarch Chop Feed | Husted Milling Co. | Buffalo, N. Y. | 7.84 | 7.50 | 4.41 | 3.50 | 6.25 | 8.00 |
| Husted Stock Feed | Husted Milling Co. | Buffalo, N. Y. | 10.60 | 8.00 | 6.11 | 4.00 | 8.22 | 9.00 |
| Husted Yellow Provender | Husted Milling Co. | Buffalo, N. Y. | 9.42 | 7.00 | 4.78 | 4.00 | 5.45 | 9.00 |
| Mayflower Stock Feed | Husted Milling Co. | Buffalo, N. Y. | 10.20 | 7.50 | 5.33 | 3.50 | 5.92 | 9.00 |
| Zenith Stock Feed | Husted Milling Co. | Buffalo, N. Y. | 11.64 | 10.00 | 5.32 | 4.00 | 5.33 | 9.00 |
| Sterling Feed | Indiana Milling Co. | Terre Haute, Ind. | 10.86 | 9.80 | 3.10 | 2.75 | 15.44 | 14.00 |
| Larro-Feed for Dairy Cows | The Larrowe Milling Co. | Detroit, Mich. | 19.62 | 19.00 | 3.75 | 3.00 | 13.14 | 14.00 |
| Brooks' Fancy Corn and Oat Stock Feed | A. H. McLeod Milling Co. | St. Johnsbury, Vt. | 9.90 | 9.00 | 3.76 | 3.00 | 8.99 | 8.50 |
| Blue Ribbon Dairy Feed | The Quaker Oats Co. | Chicago, Ill. | 23.72 | 25.00 | 4.53 | 4.00 | 11.95 | 9.00 |
| Daisy Dairy Feed | The Quaker Oats Co. | Chicago, Ill. | 16.12 | 16.00 | 4.45 | 3.50 | 13.10 | 14.50 |
| Schumacher Special Horse Feed | The Quaker Oats Co. | Chicago, Ill. | 10.07 | 9.25 | 3.96 | 3.25 | 8.11 | 8.00 |
| Schumacher Stock Feed | The Quaker Oats Co. | Chicago, Ill. | 11.29 | 10.00 | 4.43 | 3.25 | 11.88 | 10.00 |
| Victor Feed | The Quaker Oats Co. | Chicago, Ill. | 8.85 | 8.00 | 4.29 | 3.00 | 11.76 | 12.00 |
| White Diamond Feed | The Quaker Oats Co. | Chicago, Ill. | 10.42 | 8.00 | 4.94 | 3.25 | 8.14 | 9.00 |

| Name of Brand. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| COMPOUNDED FEEDS—*Continued.* | | | | | | | | |
| Purina Feed | Ralston Purina Co. | St. Louis, Mo. | 14.29 | 12.50 | 4.30 | 4.00 | ..... | 9.80 |
| Camp's Little Wonder Chop Feed | The Toledo Grain and Milling Co | Toledo, Ohio | 8.45 | 7.00 | 3.35 | 3.00 | 7.35 | 9.00 |
| Blue Grass Feed | A. Waller & Co. | Henderson, Ky. | 11.25 | 9.00 | 2.47 | 2.00 | ..... | 17.00 |
| CALF MEALS. | | | | | | | | |
| Blatchford's Calf Meal | The Blatchford Calf Meal Fact'ry | Waukegan, Ill. | 24.42 | 24.00 | 5.19 | 5.00 | ..... | 6.00 |
| Triangle Calf Feed | Chapin & Co. | Hammond, Ind. | 17.52 | 16.00 | 10.39 | 8.00 | ..... | ..... |
| Gregson Calf Meal | The Great Western Cereal Co. | Chicago, Ill. | 28.81 | 25.00 | 7.29 | 5.00 | ..... | 5.00 |
| Grofat Calf Meal | International Stock Food Co. | Minneapolis, Minn. | 25.92 | 25.00 | 6.39 | 5.00 | ..... | 10.00 |
| Schumacher Calf Meal | The Quaker Oats Co. | Chicago, Ill. | 19.13 | 19.00 | 7.94 | 8.00 | ..... | 3.00 |
| BEET PULPS. | | | | | | | | |
| Dried Beet Pulp | Charles Pope | Chicago, Ill. | 9.82 | 8.00 | 1.27 | .05 | ..... | 20.00 |
| Dried Beet Pulp | The Larrowe Milling Co. | Detroit, Mich. | 8.32 | 8.00 | .86 | .50 | ..... | 20.00 |
| Bent's Milk Albumen for Poultry | The Bent-Coissont Co. | Antwerp, N. Y. | 42.95 | 40.00 | 1.85 | 1.00 | ..... | ..... |
| DISTILLERS' GRAINS. | | | | | | | | |
| Ajax Flakes | Ajax Milling & Feed Co. | Buffalo & New York | 31.44 | 30.00 | 12.40 | 11.00 | 12.55 | 14.00 |
| Fourex Grains | J. W. Biles Co. | Cincinnati, Ohio | 31.09 | 31.00 | 13.66 | 12.00 | 9.98 | 13.00 |
| Empire State Dairy Feed | Clark Bros. & Co. | Peoria, Ill. | 33.19 | 29.00 | 12.46 | 12.00 | 11.20 | 12.00 |
| Empire State Dairy Feed | Clark Bros. & Co. | Peoria, Ill. | 26.27 | 28.00 | 14.70 | 10.00 | 7.80 | 12.50 |
| Dewey's Distillers' Dried Corn Grains | The Dewey Bros. Co. | Blouchester, Ohio | 24.61 | 26.00 | 14.21 | 9.00 | 8.14 | 13.00 |
| Bull Brand Dried Brewers' Grains | Farmers Feed Co. | New York City | 28.67 | 27.20 | 7.94 | 6.30 | 11.57 | 17.20 |
| Hector Distillers' Dried Grains | Hottelet & Co. | Milwaukee, Wis. | 34.41 | 30.00 | 10.73 | 10.00 | 13.31 | 14.00 |
| Husted Distillers' Grains | Husted Milling Co. | Buffalo, N. Y. | 28.11 | 30.00 | 12.90 | 8.00 | ..... | 11.00 |
| Jersey Malt Sprouts | M. G. Rankin & Co. | Milwaukee, Wis. | 26.67 | 25.00 | 2.49 | 1.50 | 11.57 | 17.00 |
| FLAXSEED MEALS. | | | | | | | | |
| Cleveland Flax Meal | The American Linseed Co. | Chicago, Ill. | 38.61 | 36.00 | 1.95 | 1.00 | 6.90 | 7.50 |
| Linseed Oil Meal | The American Linseed Co. | Chicago, Ill. | 34.59 | 36.00 | 2.18 | 1.00 | ..... | 7.50 |
| Old Process Oil Meal | The American Linseed Co. | Chicago, Ill. | 35.99 | 32.00 | 6.65 | 5.00 | 7.10 | 7.00 |

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|---|---|---|---|---|---|---|---|
| FLAXSEED MEALS.—*Continued.* | | | | | | | |
| Ground Oil Cake | Archer-Daniels Linseed Co. | Minneapolis, Minn. | 36.78 | 32.00 | 6.94 | 6.00 | 10.00 |
| Pure Oil Meal | Kelloggs & Miller | Amsterdam, N. Y. | 35.73 | 33.00 | 6.27 | 5.00 | 6.50 | 7.50 |
| Old Process Oil Meal | The Guy G. Major Co. | Toledo, Ohio | 35.61 | 30.00 | 5.92 | 5.00 | 10.00 |
| Pure Old Process Linseed Oil Meal | The Mann Bros. Co. | Buffalo, N. Y. | 34.59 | 34.00 | 7.59 | 6.00 | 8.80 | 10.00 |
| Old Process Oil Meal | The Metzger Seed and Oil Co. | Toledo, Ohio | 34.50 | 30.00 | 6.41 | 5.00 | 10.00 |
| Old Process Ground Linseed Cake | Midland Linseed Products Co. | Minneapolis, Minn. | 34.15 | 32.00 | 7.54 | 6.00 | 7.95 | 8.50 |
| Ground Oil Cake | Red Wing Linseed Co. | Red Wing, Minn. | 37.21 | 30.00 | 8.24 | 5.00 | 7.01 | 9.00 |
| GLUTEN FEEDS. | | | | | | | |
| Cream of Corn Gluten Feed | American Maize Product Co. | New York City | 23.11 | 23.00 | 3.42 | 2.50 | 6.88 | 8.50 |
| Buffalo Gluten Feed | Corn Products Refining Co. | New York City | 26.71 | 23.00 | 4.73 | 2.00 | 6.89 | 8.50 |
| Diamond Gluten Meal | Corn Products Refining Co. | New York City | 48.69 | 40.00 | 3.21 | 1.50 | 1.07 | |
| Clinton Gluten Feed | Clinton Sugar Refining Co. | Clinton, Iowa | 24.57 | 20.00 | 4.46 | 3.00 | | 8.00 |
| Jenk's Gluten Feed | Huron Milling Co. | Harbor Beach, Mich | 25.88 | 23.00 | 3.13 | 3.00 | 5.58 | 8.00 |
| Bay State Gluten Feed | J. E. Soper Co. | Boston, Mass. | 21.13 | 20.00 | 2.43 | 2.00 | | 8.00 |
| Staley's Gluten Feed | A. E. Staley Milling Co. | Decatur, Ill. | 24.83 | 23.00 | 3.84 | 2.50 | | 12.00 |
| MEAT AND BONE FEEDS. | | | | | | | |
| Beef Scraps | The American Agri. Chemical Co. | New York City | 42.03 | 40.00 | 14.33 | 5.00 | | |
| Bone Meal for Cattle | The American Agri. Chemical Co. | New York City | 17.60 | | 9.81 | | | |
| Bradley's Superior Meat Meal | The American Agri. Chemical Co. | New York City | 31.33 | 30.00 | 8.83 | 8.00 | | |
| Pure Ground Beef Scraps for Poultry and Swine | Beach Soap Co. | Lawrence, Mass. | 40.81 | 40.00 | 12.48 | 20.00 | | |
| Beach's Star Brand Granulated Bone | Beach Soap Co. | Lawrence, Mass. | 30.00 | 25.00 | 10.63 | 5.00 | | |
| Beach's Star Brand Meat and Bone Meal | Beach Soap Co. | Lawrence, Mass. | 28.63 | 30.00 | 11.11 | 10.00 | | |
| Beach's Star Brand Pure Bone Meal | Beach Soap Co. | Lawrence, Mass. | 9.98 | 10.00 | 12.71 | 8.00 | | |
| Bowker's Animal Meal for Fowls and Chicks | Bowker Fertilizer Co. | Boston, Mass. | 40.37 | 40.00 | 10.20 | 5.00 | | |
| Crushed Bone for Poultry | Bowker Fertilizer Co. | Boston, Mass. | 19.53 | 12.00 | 4.92 | 6.00 | | |
| Bone Meal | Bowker Fertilizer Co. | Boston, Mass. | 17.78 | | 10.49 | | | |
| Bowker's Fresh Ground Beef Scraps | Bowker Fertilizer Co. | Boston, Mass. | 41.01 | 40.00 | 11.71 | 5.00 | | |
| Breck's Ground Beef Scraps | Joseph Breck & Sons | Boston, Mass. | 44.01 | 43.00 | 16.01 | 12.00 | | |
| Burlington Cooked Meat Scraps for Poultry | Burlington Rendering Co. | Burlington, Vt. | 42.61 | 40.00 | 13.16 | 8.00 | | |
| High Protein Beef Scraps for Poultry | Cypher's Incubator Co. | Buffalo, N. Y. | 45.53 | 45.00 | 13.48 | 10.00 | | |
| Dow's Favorite Poultry Meal | John C. Dow Co. | Boston, Mass. | 32.93 | 32.00 | 12.42 | 10.00 | | |
| Ground Beef Scraps | John C. Dow Co. | Boston, Mass. | 44.13 | 15.00 | 15.71 | 12.00 | | |
| Bone Meal for Cattle | Thomas W. Emerson Co. | Boston, Mass. | 13.18 | 6.00 | 7.48 | 12.00 | | |
| Bone Meal | Essex Fertilizer Co. | Boston, Mass. | 19.71 | 20.00 | 7.06 | 5.00 | | |
| Cracked Bone | Essex Fertilizer Co. | Boston, Mass. | 24.09 | 20.00 | 6.44 | 5.00 | | |

| Name of Brand. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| MEAT AND BONE FEEDS.—*Continued* | | | | | | | | |
| Essex Cooked Meat Scraps for Poultry | Essex Fertilizer Co. | Boston, Mass. | 41.91 | 40.00 | 13.11 | 8.00 | ..... | ..... |
| Greene's Fish Mash for Poultry | Greene Chicken Feed Co. | Marblehead, Mass. | 14.49 | 12.00 | 4.69 | 3.00 | ..... | ..... |
| Greene's Old-Fashioned Meat Scraps | Greene Chicken Feed Co. | Marblehead, Mass. | 37.21 | 40.00 | 9.40 | 5.00 | ..... | ..... |
| "M" Beef Scraps | W. D. Higgins | S. Framingh'm, Mass | 43.08 | 30.00 | 11.97 | 12.00 | ..... | ..... |
| Hill's Fish Meal | William S. Hills | Jamestown, N. Y. | 45.27 | 45.00 | 2.97 | 3.00 | ..... | ..... |
| Bone and Meat Meal | Hinckley Rendering Co. | Somerville, Mass. | 38.61 | 35.00 | 8.20 | 8.00 | ..... | ..... |
| Hinckley Poultry Food prepared from Cooked Meat Scraps | Hinckley Rendering Co. | Somerville, Mass. | 38.10 | 35.00 | 9.93 | 8.00 | ..... | ..... |
| Red Star Brand Fish Scraps | International Glue Co. | Boston, Mass. | 42.82 | 45.00 | 2.58 | 2.00 | ..... | ..... |
| Beef Scraps | A. Lord & Co. | Chelsea, Mass. | 36.69 | 30.00 | 16.50 | 17.00 | ..... | ..... |
| Lowell Bone Meal for Cattle and Poultry | Lowell Fertilizer Co. | Boston, Mass. | 26.66 | ..... | 7.52 | ..... | ..... | ..... |
| Bone and Meat Meal for Poultry | Manchester Rendering Co. | Manchester, N. H. | 36.86 | 35.00 | 12.26 | 8.00 | ..... | ..... |
| Poultry Food prepared from Cooked Meat Scraps | Manchester Rendering Co. | Manchester, N. H. | 40.72 | 40.00 | 11.89 | 8.00 | ..... | ..... |
| Marsh's Pure Ground Beef Scraps | George E. Marsh Co. | Lynn, Mass. | 46.84 | 45.00 | 11.88 | 10.00 | ..... | ..... |
| Ground Scraps | Carroll S. Page | Hyde Park, Vt. | 47.10 | 40.00 | 19.15 | 20.00 | ..... | ..... |
| Blue Ribbon Meat Scraps | The Park & Pollard Co. | Boston, Mass. | 45.44 | 45.00 | 18.91 | 12.00 | ..... | ..... |
| Bone Meal for Cattle and Poultry | Portland Rendering Co. | Portland, Me. | 24.74 | 20.00 | 9.25 | 5.00 | ..... | ..... |
| Cracked Bone for Poultry | Portland Rendering Co. | Portland, Me. | 27.54 | 10.00 | 5.03 | 5.00 | ..... | ..... |
| Cooked Meat Scraps for Poultry | Portland Rendering Co. | Portland, Me | 40.11 | 40.00 | 10.00 | 8.00 | ..... | ..... |
| Sanborn's High Grade Meat and Meal for Poultry | H. W. Sanborn | Pittsfield, N. H. | 42.38 | 40.00 | 11.47 | 8.00 | ..... | ..... |
| Swift's Lowell Bone and Meat Meal | Swift's Lowell Fertilizer Co. | Boston, Mass. | 40.63 | 35.00 | 13.96 | 8.00 | ..... | ..... |
| Swift's Lowell Cracked Bone for Poultry | Swift's Lowell Fertilizer Co. | Boston, Mass. | 27.15 | 20.00 | 4.02 | 5.00 | ..... | ..... |
| Swift's Lowell Cooked Meat Scraps | Swift's Lowell Fertilizer Co. | Boston, Mass. | 47.10 | 40.00 | 13.65 | 8.00 | ..... | ..... |
| Whitman & Pratt's Beef Scraps | Whitman & Pratt Rendering Co. | Lowell, Mass. | 48.16 | 45.00 | 14.55 | 10.00 | ..... | ..... |
| Poultry Food prepared from Cooked Meat Scraps | Worcester Rendering Co. | Auburn, Mass. | 40.19 | 40.00 | 11.99 | 8.00 | ..... | ..... |

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| COTTON SEED MEALS. | | | | | | | | |
| Cub Brand Prime Cotton Seed Meal | F. W. Brode & Co. | Memphis, Tenn. | 40.81 | 40.00 | 7.02 | 6.00 | ..... | 10.00 |
| Dove Brand Cotton Seed Meal | F. W. Brode & Co. | Memphis, Tenn. | 39.10 | 38.63 | 7.47 | 6.00 | ..... | 10.00 |
| Owl Brand High Grade Cotton Seed Meal | F. W. Brode & Co. | Memphis, Tenn. | 39.93 | 41.00 | 8.88 | 6.00 | ..... | 10.00 |
| Buckeye Prime Cotton Seed Meal | The Buckeye Cotton Oil Co. | Cincinnati, Ohio | 38.79 | 38.62 | 8.39 | 6.50 | 12.23 | 12.00 |
| Acme Brand Pure Cotton Seed Meal | T. H. Bunch Commission Co. | Little Rock, Ark. | 39.41 | 38.60 | 8.75 | 7.00 | ..... | 12.00 |
| Old Gold Brand Pure Cotton Seed Meal | T. H. Bunch Commission Co. | Little Rock, Ark. | 41.02 | 41.00 | 7.86 | 9.00 | ..... | 9.00 |
| Peerless Brand Cotton Seed Meal | Florida Cotton Oil Co. | Jacksonville, Fla. | 40.72 | 41.00 | 8.44 | 7.50 | ..... | 8.00 |
| Dixie Brand Cotton Seed Meal | Humphrey & Godwin Co. | Memphis, Tenn. | 41.00 | 38.62 | 8.35 | 6.00 | ..... | 12.00 |
| Forfat Brand Cotton Seed Meal | Humphrey & Godwin Co. | Memphis, Tenn. | 38.70 | 38.62 | 7.31 | 6.00 | ..... | 12.00 |
| Cremo Brand Cotton Seed Feed | Humphrey & Godwin Co. | Memphis, Tenn. | 21.24 | 20.00 | 4.61 | 5.00 | ..... | 22.00 |
| Imperial Cotto Brand Cotton Seed Meal | Imperial Cotto Milling Co. | Memphis, Tenn. | 41.86 | 41.00 | 7.84 | 8.00 | ..... | 9.00 |
| Peacock Brand Cotton Seed Meal | Keeton-McArthur Co. | Atlanta, Ga. | 39.41 | 41.00 | 7.48 | 6.00 | ..... | 10.00 |
| Bee Brand Cotton Seed Meal Cake | W. C. Northern | Little Rock, Ark. | 43.37 | 41.00 | 9.24 | 7.00 | ..... | 10.50 |
| Baltimore Brand Cotton Seed Meal | W. Newton Smith | Baltimore, Md. | 37.65 | 38.62 | 13.02 | 7.00 | ..... | 10.50 |
| Dirigo Brand Cotton Seed Meal | W. Newton Smith | Baltimore, Md | 42.21 | 41.00 | 7.15 | 7.00 | ..... | 10.50 |
| Pilgrim Brand Cotton Seed Meal | J. E. Soper Co. | Boston, Mass. | 38.79 | 38.50 | 7.57 | 5.00 | ..... | 10.00 |
| Pioneer Cotton Seed Meal | J. E. Soper Co. | Boston, Mass. | 42.38 | 41.00 | 10.45 | 7.00 | ..... | 10.00 |
| HOMINY FEEDS. | | | | | | | | |
| Homco Feed | American Hominy Co. | Indianapolis, Ind. | 11.79 | 9.50 | 8.59 | 7.00 | 9.38 | 7.00 |
| Bufceco Hominy Feed | Buffalo Cereal Co. | Buffalo, N. Y. | 11.31 | 10.00 | 8.02 | 7.00 | 4.42 | 4.00 |
| Wirthmore Hominy Meal | Charles M. Cox Co. | Boston, Mass. | 10.12 | 9.50 | 8.13 | 7.50 | 4.33 | 5.60 |
| Success Hominy Feed | Deutsch & Sickert Co. | Milwaukee, Wis. | 13.22 | 11.00 | 6.73 | 7.00 | 5.90 | 4.00 |
| Badger Hominy Feed | Charles A. Krause | Milwaukee, Wis. | 12.44 | 9.00 | 6.68 | 6.00 | 5.76 | 5.00 |
| Choice Steam-Cooked Hominy Feed | Miner-Hilliard Milling Co. | Wilkes-Barre, Pa. | 10.86 | 10.00 | 5.13 | 5.00 | 3.88 | 5.00 |
| Blue Ribbon Hominy Chop | J. E. Soper Co. | Boston, Mass. | 12.09 | 10.00 | 7.10 | 7.00 | 4.16 | 5.00 |
| Hominy Feed | The Patent Cereals Co. | Geneva, N. Y. | 11.62 | 10.00 | 8.19 | 7.00 | ..... | 5.00 |
| Logan Hominy Feed | The Standard Cereal Co. | Chillicothe, Ohio | 11.33 | 9.00 | 7.24 | 7.00 | 3.79 | 6.00 |
| MOLASSES FEEDS. | | | | | | | | |
| Sucrene Dairy Feed | American Milling Co. | Chicago, Ill. | 17.22 | 16.50 | 4.06 | 3.50 | 9.82 | 12.00 |
| Husted Alfalfa Horse Feed | Husted Milling Co. | Buffalo, N. Y. | 10.90 | 10.00 | 3.39 | 3.00 | 8.55 | 15.00 |
| Husted Molasses Feed | Husted Milling Co. | Buffalo, N. Y. | 20.71 | 18.00 | 4.53 | 4.00 | 7.61 | 9.00 |
| Husted Oatmolene Horse Feed | Husted Milling Co. | Buffalo, N. Y. | 11.21 | 9.00 | 5.11 | 3.00 | 7.72 | 7.00 |
| Molasses Horse Feed | Husted Milling Co. | Buffalo, N. Y. | 9.83 | 7.00 | 4.09 | 3.00 | 3.97 | 9.00 |
| Molassine Meal | The Molassine Co., Ltd. | England | 3.98 | 7.00 | 1.87 | 7.00 | 6.27 | ..... |
| Quaker Molasses Dairy Feed | The Quaker Oats Co. | Chicago, Ill. | 17.12 | 16.00 | 4.55 | 3.50 | 15.82 | 14.00 |
| Purina Molasses Feed | Ralston Purina Co. | St. Louis, Mo. | 11.96 | 9.00 | 2.78 | 1.50 | 12.45 | 12.00 |
| Hammond Dairy Feed | The Western Grain Products Co. | Hammond, Ind. | 18.62 | 16.50 | 4.38 | 3.50 | 12.02 | 11.00 |
| Hammond Horse Feed | The Western Grain Products Co. | Hammond, Ind. | 12.61 | 12.00 | 4.02 | 2.80 | 7.33 | 11.00 |

| Name of Brand. | Manufactured by | Address. | Protein. | | Fat. | | Crude Fiber. | |
|---|---|---|---|---|---|---|---|---|
| | | | Found. | Guaranteed. | Found. | Guaranteed. | Found. | Guaranteed. |
| POULTRY FEEDS. | | | | | | | | |
| Bufeeco Poultry Feed | Buffalo Cereal Co. | Buffalo, N. Y. | 16.33 | 15.00 | 5.15 | 4.00 | 5.24 | 5.00 |
| Wirthmore Growing Feed | Charles M. Cox Co | Boston, Mass. | 11.43 | 12.00 | 3.06 | 4.00 | 3.44 | ..... |
| Wirthmore Poultry Mash | Charles M. Cox Co. | Boston, Mass. | 21.41 | 20.00 | 4.67 | 4.00 | 5.30 | 9.50 |
| Queen Poultry Mash | The Albert Dickinson Co. | Chicago, Ill. | 11.43 | 10.00 | 4.65 | 2.50 | 5.85 | 5.00 |
| Balanced Hen Rations (Maine State Formula) | C. N. Dodge | Hampton Falls, N.H. | 22.72 | ..... | 5.36 | ..... | ..... | ..... |
| Grondin's Poultry Mash | D. H. Grondin Milling Co. | Jamestown, N. Y. | 16.33 | 15.00 | 4.20 | 4.00 | ..... | 8.00 |
| Wonder Poultry Feed | Flint Mill Co. | Milwaukee, Wis. | 19.96 | 22.00 | 6.06 | 4.00 | ..... | ..... |
| Greene's Growing Feed for Chickens | Greene Chick Feed Co. | Marblehead, Mass. | 12.69 | 12.00 | 3.65 | 3.00 | ..... | ..... |
| Green River Grain Co.'s Poultry Food | Green River Grain Co. | Greenfield, Mass. | 17.25 | 16.46 | 4.39 | 4.14 | ..... | ..... |
| The H. O. Company's Poultry Feed. | The H-O Co. | Buffalo, N. Y. | 18.87 | 17.00 | 4.80 | 5.50 | 7.18 | 9.00 |
| Purity Poultry Mash | William S. Hills Co. | Boston, Mass. | 16.73 | 10.70 | 5.25 | 4.00 | 16.64 | 16.70 |
| Monadnock Poultry Mash | The Holbrook Grocery Co. | Keene, N. H. | 11.10 | 11.00 | 3.90 | 2.50 | 6.80 | 10.00 |
| Husted Laying Mash | Husted Milling Co. | Buffalo, N. Y. | 16.03 | 15.00 | 5.00 | 3.00 | 5.38 | 8.00 |
| Laying Mixture | C. F. Kimball & Son | Salem Depot, N. H. | 21.56 | ..... | 6.37 | ..... | 7.30 | ..... |
| Laying Mash | William H. Knox | Dover, N. H. | 19.40 | 19.19 | 5.60 | 5.23 | 7.88 | ..... |
| Growing Feed | The Park & Pollard Co | Boston, Mass. | 15.11 | 14.00 | 5.44 | 3.12 | ..... | 10.00 |
| Fattening Feed | The Park & Pollard Co. | Boston, Mass. | 11.78 | 10.00 | 2.64 | 3.00 | ..... | 8.00 |
| Purina Chicken Chowder Feed | Purina Mills | St. Louis, Mo. | 17.78 | 17.00 | 3.83 | 3.00 | ..... | 9.00 |
| Dry Mash Feed | The Park & Pollard Co. | Boston, Mass. | 18.04 | 18.00 | 3.51 | 3.50 | 5.94 | 12.00 |
| Poultry Mash | W. N. Potter & Sons | Greenfield, Mass. | 17.11 | 15.00 | 4.81 | 4.00 | ..... | 11.00 |
| American Poultry Feed | The Quaker Oats Co. | Chicago, Ill. | 14.32 | 12.00 | 5.27 | 3.50 | ..... | 9.00 |
| Bunker Hill Mash | Nathan Tufts & Sons | Charlestown, Mass. | 13.75 | 15.25 | 4.71 | 3.50 | ..... | 3.50 |

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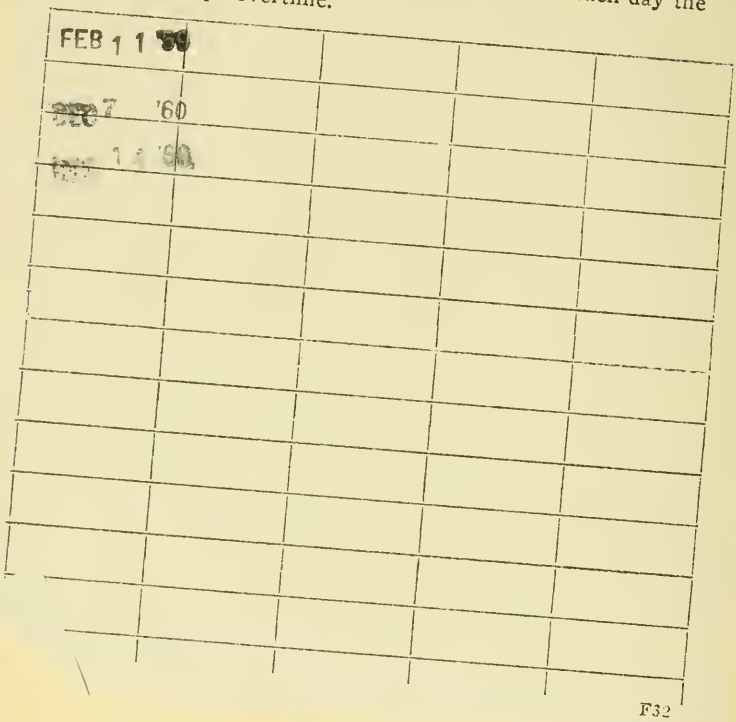


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